



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,488	12/26/2001	Rudolf Bitzinger	112740-275	7114
29177	7590	11/01/2005	EXAMINER	
BELL, BOYD & LLOYD, LLC			SOL, ANTHONY M	
P. O. BOX 1135				
CHICAGO, IL 60690-1135			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/936,488	Applicant(s) BITZINGER ET AL.
	Examiner Anthony Sol	Art Unit 2662
<i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>		
Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.		
<ul style="list-style-type: none"> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). 		
Status		
1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>26 December 2001</u> . 2a) <input type="checkbox"/> This action is FINAL. 2b) <input checked="" type="checkbox"/> This action is non-final. 3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) <input checked="" type="checkbox"/> Claim(s) <u>17-32</u> is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) <input type="checkbox"/> Claim(s) _____ is/are allowed. 6) <input checked="" type="checkbox"/> Claim(s) <u>17-32</u> is/are rejected. 7) <input type="checkbox"/> Claim(s) _____ is/are objected to. 8) <input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement.		
Application Papers		
9) <input type="checkbox"/> The specification is objected to by the Examiner. 10) <input checked="" type="checkbox"/> The drawing(s) filed on <u>26 December 2001</u> is/are: a) <input type="checkbox"/> accepted or b) <input checked="" type="checkbox"/> objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) <input type="checkbox"/> The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) <input checked="" type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) <input checked="" type="checkbox"/> All b) <input type="checkbox"/> Some * c) <input type="checkbox"/> None of: 1. <input checked="" type="checkbox"/> Certified copies of the priority documents have been received. 2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____. 3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)		
1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____		
4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____		
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)		
6) <input type="checkbox"/> Other: _____		

DETAILED ACTION

- Applicant's preliminary amendment filed 12/26/01 is acknowledged.
- Claims 1-16 have been canceled.
- Claims 17-32 have been added.

1. The drawings are objected to because elements of the network that is essential to the understanding of the invention should be labeled clearly. Any abbreviation that is not widely used and not well known should be avoided and replaced or augmented with actual element names. For example, in figure 1, KN should be replaced/augmented with Communications Networks, KN (1) with Communications Network 1, KN (2) with Communications Network 2, KN (3) with Communications Network 3, L1 with LAN 1, L2 with LAN2, IN with Internet, GK with Gatekeeper, ED (1) with Edge Device 1, and ED (2) with Edge Device 2. Similar corrections should be made to figure 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the

remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 17-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 17,

The applicant discloses, "allocating, via the controller, the Quality of Service for the requested use of the service as a function of at least one of the service and the requested use of the service." It is not clear what is meant by a function of the service or the function of the requested use of the service. There must be further definition or explanation of what is meant by function.

Regarding claim 26,

The applicant discloses, "providing at least one high Quality of Service *in* at least one low Quality of Service in the communications network." This does not make sense. How can you have a high QoS *in* a low QoS?

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 17-32 are rejected as best understood under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,680,922 B1 ("Jorgensen").

Regarding claim 17,

Jorgensen shows in Fig. 15A a downlink IP flow analyzer (controller) which includes packet header identification component 1502, packet characterization component 1504, packet classification component 1506, and IP flow presentation component 1508 (Col. 61, lines 28-31). Jorgensen discloses a packet characterization component 1504 that characterizes a new data packet to determine the QoS requirements (requesting use of the service is inherent in order to determine the QoS requirements) for the IP data flow, and identifies the subscriber CPE station associated

with the subscriber workstation that will receive the IP data flow (Col. 61, lines 56-59; claim 17 – requesting, by a controller, use of the service).

Jorgensen further discloses that packet classification component 1506 classifies the new IP data flow into a communications priority class and downlink flow scheduler 604 places the data packets of an IP data flow into a class queue (Col. 61, lines 61-67; claim 17 - requesting, by a controller, use of the service; and allocating, via the controller, the Quality of Service for the requested use of the service as a function of at least one of the service and the requested use of the service).

6. Regarding claim 18,

Jorgensen discloses a method that covers all the limitations of the parent claim.

Jorgensen discloses that differentiation can be done on the basis of some identifiable information contained in packet headers. Jorgensen further discloses that one method can include analyzing an IP packet header, which can serve to uniquely identify and associate the packet and other packets from that packet flow with a particular application, function, or purpose (use of the service) (Col. 18, lines 13-19; claim 18 - the use of the service is requested without stating the Quality of Service).

7. Regarding claim 19,

Jorgensen discloses a method that covers all the limitations of the parent claim.

Jorgensen discloses that a gateway also translates between audio and video codecs and performs call setup and clearing on both the LAN side and the switched-circuit network side (Col. 38, lines 37- col. 39, lines 1-3; claim 19 - the service is the transmission of voice information).

8. Regarding claims 20 and 21,

Jorgensen discloses a method that covers all the limitations of the parent claim.

Jorgensen discloses that a source IP address, a source TCP or UDP port, a destination IP address, and a destination IP or UDP port can serve to associate (checking) packets into a common flow (at least one packet stream), i.e. can be used to classify the packets into a class of service. Jorgensen further discloses that by creating a finite and manageable number of discrete classes of service, multiple IP flows can be consolidated and handled (whether the requested use of the service can be provided) with a given set of QoS parameters by the QoS mechanisms (the intended Quality of Service by the communications network) (Col. 18, lines 18-26; claim 20 - checking, via the controller, whether the requested use of the service can be provided with the intended Quality of Service by the communications network; claim 21 - when the service is used by the communications network, at least one packet stream which is allocated to the service is transmitted with the Quality of Service).

9. Regarding claim 22,

Jorgensen discloses a method that covers all the limitations of the parent claim.

Jorgensen shows in Fig. 2D a router 140d (network gateway device) receiving QoS signals (described in the rejection to claim 21) from wireless base station 302 (Claim 22 - signaling, via the controller, the Quality of Service of the packet stream to at least one network gateway device).

Jorgensen discloses that the downlink flow scheduler 604 of Fig. 15A places the data packets (packet stream) of an IP data flow, after being classified into a priority class based on QoS requirements, into a class queue for transmission to a subscriber CPE station 294d (Col. 61, lines 56-67 – col. 62, lines 1-2) of Fig. 2D using the communications network 296 (Claim 22 - transmitting, via the network gateway device, the packet stream with the signaled Quality of Service to the communications network)..

10. Regarding claim 23,

Jorgensen discloses a method that covers all the limitations of the parent claim.

Jorgensen shows in Fig. 2C a telephone gateway 288b and router 140b (edge device) (Claim 23 - the network gateway device is an edge device).

11. Regarding claims 24 and 25,

Jorgensen discloses a method that covers all the limitations of the parent claim.

Jorgensen discloses that IP packets (signaling packets) of the IP flow are identified by analyzing the header information to determine QoS requirements of the IP flow, so that the IP flow can be characterized, classified, presented (acknowledgement), prioritized and scheduled (Col. 42, lines 1-5; claim 24 - requiring at least one acknowledgement of the signaled Quality of Service for the allocation of the Quality of Service; claim 25 - Quality of Service is signaled using signaling packets).

12. Regarding claim 26,

Jorgensen discloses a method that covers all the limitations of the parent claim.

Jorgensen discloses that data traffic can be handled based on classes of service. Jorgensen further discloses that to differentiate traffic by class, data traffic can be classified into one of several classes of service (Col. 18, lines 9-13; claim 26 - providing at least one high Quality of Service and at least one low Quality of Service in the communications network).

13. Regarding claims 27-31,

Jorgensen discloses a method that covers all the limitations of the parent claim.

Jorgensen discloses a real-time transport protocol (RTP) that adds a time stamp and a header (Quality of Service tag) that distinguishes whether an IP packet (Internet packets) is data or voice, allowing prioritization of voice packets (Col. 43, lines 58-60;

claim 27 - packet streams with the high Quality of Service are transmitted with priority by the network gateway device; claim 28 - providing a Quality of Service tag in the packets; claim 29 - the network gateway device transmits packet streams which are to be transmitted with a high Quality of Service with a first Quality of Service tag which represents the high Quality of Service, and transmits remaining packet streams with a second Quality of Service tag which represents the low Quality of Service; claim 30 – producing the Quality of Service on the basis of priorities, the high Quality of Service being high priority and the low Quality of Service being low priority, and the Quality of Service tag being a priority tag; claim 31 - the packets are Internet packets).

14. Regarding claim 32,

Jorgensen discloses a method that covers all the limitations of the parent claim.

Jorgensen discloses that the H.323 gatekeeper acts as a virtual switch (Col. 38, lines 34-35; claim 32 - the controller is a gate keeper in accordance with International Standard H.323).

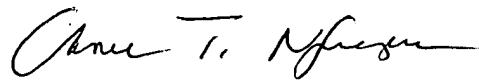
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Sol whose telephone number is (571) 272-5949. The examiner can normally be reached on M-F 7:30am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600


Anthony Sol
Examiner
Art Unit 2662

10/25/2005